DOCUMENT RESUME

ED 385 025 EC 304 053

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TITLE An Inside Look at School Reform: What We Have Learned about Assessing Student Learning in a Nongraded Primary School.
INSTITUTION Oregon Univ., Eugene. Coll. of Education.
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE Feb 95
CONTRACT H023R30026
NOTE 18p.; In: The Oregon Conference Monograph 1995. Volume 7; see EC 304 046.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Beginning Reading; Educational Change; *Evaluation Methods; High Risk Students; Nongraded Instructional Grouping; Primary Education; Reading Readiness; Regular and Special Education Relationship; School Restructuring; *Special Needs Students; *Student Evaluation; Writing (Composition)
IDENTIFIERS *Authentic Assessment

ABSTRACT

This paper provides background information on school reform and describes efforts to implement an assessment system for students with disabilities in 12 nongraded primary classrooms. Background information briefly covers the school restructuring movement, the history of nongraded primary education, alternative assessment strategies which focus on real world applications, and the application of assessment procedures to general and special education needs. The assessment system described was designed to: (1) provide teachers with information they consider important; (2) document student achievement over time and in relation to normal achieving peers; and (3) facilitate communication between general and special education teachers. The program developed assessment tasks in reading, written expression, and mathematics. Discussion was limited to reading and written expression because of space and because teachers were more satisfied with the assessment information in these areas. Examples of assessment tasks included identification of letter names, knowledge of most common letter sounds, and sentence copying for early primary (kindergarten and grade 1) students; and oral reading fluency and creative writing for late primary (grades 2 and 3) students. Assessment at the end of the first year provided information on current practices and student performance, and these classroom-based authentic assessment procedures are to be continued a second year. Increased frequency in monitoring assessment of students identified as at risk is also planned. (Contains 12 references.) (DB)

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ED 385 025

# An Inside Look at School Reform: What We Have Learned About Assessing Student Learning in a Nongraded Primary School

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THE COLLEGE OF EDUCATION AT THE UNIVERSITY OF OREGON IS IN THE SECOND YEAR OF A 5-year collaborative project with three elementary schools in the Eugene area. The project is being funded by the U.S. Department of Special Education, Office of Special Education Programs. The Office of Special Education is interested in studying how school reform efforts, which are occurring at the national level, affect students with disabilities. The specific purpose of the grant is to influence and explain the relations among interdependent school systems and resource use strategies (e.g., team building, consultation, student assessment) within the context of school reform efforts including the implementation of nongraded, multi-age programs and developmentally appropriate practices, site-based management, and alternative assessment practices.

The purpose of this paper is to provide background information on school reform and describe our efforts thus far in working with one elementary school to implement a student assessment system that (a) provides teachers with information they consider important, (b) documents how well students in special education are learning over time and in relation to normal achieving peers, and (c) facilitates communication between general and special education teachers regarding how to improve instructional programs for students with disabilities.

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*This project is funded by Systematic Efforts to Restructure School Grant (HO23R30026) from the Office of Special Education Programs, United States Department of Education. However, the opinions expressed herein do not necessarily reflect the position of the U.S. Department of Education or the College of Education at the University of Oregon, and no official endorsement by the Department, College, or University should be inferred.*

*This project has been completed with the assistance of Denise Swanson who managed the data coding, entry, and organization. Acknowledgment is also due to Nancy Bell and several Master's students involved in training, assessment, and teaching. This project could not have been accomplished without the enthusiastic support and work of the teachers and their students.*

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## School Restructuring

School reform has received national attention during the last decade. National and state mandates targeting "Goals 2000" and "21st Century Schools" are discussed in schools, the professional literature, and in the media. General components that characterize the latest reform efforts include (a) the delegation of decision making from the district level to the school level (Ogawa, 1994), (b) higher levels of student achievement (U.S. Department of Education, p. 1), and (c) the use of alternative and authentic assessment practices to measure student outcomes (Baker, O'Neil, & Linn, 1993; Linn, Baker, & Dunbar, 1991). One increasingly popular approach for achieving better student outcomes, and an approach that has been widely adopted in the state of Oregon, is the use of nongraded primary classrooms that adhere to developmentally appropriate practice.

## Nongraded Primary Education: Historical Perspective

From the 1950s through the early 1970s, a movement in North America known as the Nongraded Elementary School challenged the traditional age-graded classroom structure. The major purpose of nongraded schools was to provide an alternative to the practices of grade level retention and promotion. In the 1990s, several states have promoted the structure of nongraded classrooms as a way of achieving genuine educational reform (Willis, 1991). A fundamental addition to the latest nongraded movement is the notion of "developmentally appropriate practices." These practices emphasize activity-based instruction and discourage grouping students by ability or performance. Developmentally appropriate practices (DAP) advocate that children should be allowed to develop and acquire skills at their own pace. For example, a tenet of DAP is that some children are not ready to learn to read at age 6, and this should not be a source of concern for educators. Additionally, DAP practices support the integration of curriculum throughout the school day, in place of the more traditional subject-by-subject instruction. DAP tend to employ projects, learning stations, and cooperative learning which are consistent with the philosophy of nongraded primary programs.

## Alternative Assessment Strategies

Educational reforms have begun to include new assessment approaches to align more closely with changes in school structure and classroom practices. Approaches to assessing student learning are changing dramatically in general education (GE) settings (Linn, Baker, & Dunbar, 1991), as well as in special education (SE) settings, although support for change in SE seems to be less widespread. In GE, the shift in assessment strategies has moved from evaluating student learning with published multiple-choice tests to evaluating learning using "more open-ended problems, essays, hands-on science problems, computer simulations of real world problems, and portfolios of students work" (Linn, Baker, & Dunbar, 1991, p. 15). The hallmark of alternative assessment strategies is their "authenticity," the fact that they reflect real applications of the challenging problems students engage in every day in the classroom and which mirror the real-world problems students can be expected to face beyond school.

Reforming special education assessment practices has been spurred not so much by a paradigm shift in instruction as by a desire to make assessment more relevant to instructional decision making and what students need to know, and do, to be successful in GE settings. In addition to establishing a closer link between instruction and assessment, other characteristics of alternative assessment practices in SE include utilizing more direct measures of performance, requiring production rather than selection responses, generating

data useful in making educational decisions beyond screening and eligibility for service, and collecting data that can be used to make formative decisions about student progress as well as summative decisions about overall student outcomes.

### Applying Assessment Procedures to General and Special Education Needs

The way reform affects GE and SE settings will have a strong influence on the educational experiences of students with disabilities. For example, the combination of site-based management, one of the foundations of GE reform (Ogawa, 1994), with inclusion, a philosophy of SE service being advocated and implemented in many places throughout the country (Fuchs & Fuchs, 1994), has the potential to seriously alter the very nature of SE service.

Technically adequate and functional assessment practices are needed to evaluate how students, including those with disabilities, are affected by the latest educational reform efforts. Understanding the limitations of assessment practices being promoted in GE and SE, and merging the strengths of assessment practices within each domain should facilitate evaluating the influence reform has on individual students. One approach to bridging the GE and SE assessment gaps is to increase the emphasis placed on classroom-based assessment procedures in which data have real meaning for teachers and classroom instruction.

### Purpose

One focus of our project in studying how school reform efforts affect students with disabilities has been on developing classroom-based assessment procedures. We are in the second year of data collection. In Year 1, our intent was to develop assessment procedures with teachers in the early and late primary grades that (a) they would find useful, (b) adhered to high standards of psychometric quality, and (c) would provide important information on the performance of students with disabilities and students at risk for academic failure. Data collection activities in Year 2 are being designed to provide teachers with normative data regarding the performance of all students and multiple points during the year, and more frequent data on the progress of selected students they believe are at risk.

## Student Assessment Year 1

### Setting

The target elementary school involved is located in the Pacific Northwest and serves approximately 490 students in kindergarten through Grade 5. Twelve nongraded primary classrooms were the focus of data collection. Their class size averaged 29 students. The implementation of nongraded classrooms began in this school during the 1992-93 school year.

The nongraded model included six "early primary" classrooms combining kindergarten and first grade students. Kindergarten students arrived in the morning and were in school for two and one half hours, leaving just before lunch. First-grade students were in school for 6 1/2 hours. In the six "late primary" classrooms were second and third grade students.

The assessment in Year 1 was conducted in the spring. The purpose was to determine how well students had mastered important objectives and to establish a student performance data base that we could build on in the following years. All students in the early and late primary block participated in the data collection.

### Procedures

We collaborated with the early and late primary teachers on the development of all assessment tasks. During an initial 4-hour meeting with all teachers, it was decided that reading, written expression, and mathematics would constitute the assessment tasks for both the early and late programs, and that to en-

hance decision making and continuity, there would be at least one common task between the programs.

After this initial meeting, the early and late groups met separately with us to develop assessment tasks. The tasks were developed during three separate 4-hour meetings. Components of good assessment tasks were discussed as well as the role of assessment with developmentally appropriate practices. Following is a description of the tasks and a brief presentation of the results from the first year's implementation. We have limited our discussion to reading and written expression because of space and because these were the areas teachers were most satisfied with the assessment information.

***Early Primary Tasks***

*Reading.* Three types of tasks were included in this assessment. All tasks required an oral response and were administered individually. First, students answered six questions from Marie Clay's Concepts About Print Test. This was administered to identify if students were developing initial ideas about the purposes of books and print.

On the second task set, students identified the letters and sounds of the alphabet. A page of random letters was presented to students, and they had to identify the names of capital and lower case letters, and the sounds of lower case letters. This task was administered because teachers work on this skill with some of their students during the year and because knowledge of letter names and sounds has been found to be strong predictor of reading (Adams, 1990). The third set of tasks were reading tasks. First, students were asked to read four simple 3 to 5 word sentences. Students who had some success with reading the simple sentences were asked to read a passage selected by the teachers.

We will report findings for the capital letter identification tasks and the letter-sound identification task. The number of correct responses out of 26 was the score used on each task in data analysis.

*Language Arts.* Four types of writing tasks were included in the early primary assessment. The written expression tasks were administered to small groups of students (2-4). First, students were asked to write the letters of the alphabet. Second, students were asked to write their first and last name. Third, students were given a series of sentences presented visually (copy from a paper, from a chart) or verbally (dictation) and asked to write them.

On the fourth type of task, students had to develop the writing content on their own. They wrote in response to a picture prompt, completed a sentence that was started for them, and wrote a story in response to a story starter.

We will report findings from one of the sentence copying tasks. This was scored quantitatively, by counting the number of correct letter sequences, and qualitatively, by judging the form and alignment of letters on a 1-5 scale (see Baker, Hall, & Tindal, in review).

***Late Primary Tasks***

*Reading.* The late primary reading tasks consisted of oral reading fluency (ORF) and a measure of oral retell. Students were administered two teacher-selected ORF reading probes. Classroom teachers determined that students would read two probes of high and average difficulty or average and low difficulty. Thus, all students read the probe of average difficulty. The students selected their favorite of the two passages and completed an oral retell of that story. We will report the results of the ORF assessment, which used the number of words students read correctly in one minute as the dependent measure (Tindal & Marston, 1994).

*Language Arts.* The teachers modeled the written expression tasks on two sources: (a) the procedures used during classroom writing instruction, and (b) the Oregon State As-

sessment writing task. Students engaged in one writing task administered to the whole class by the classroom teacher over three days. On day one, students brainstormed possible content for two writing themes: describing how to make the best sandwich in the world, and describing a really good friend. The teachers were free to use whatever brainstorming techniques they preferred. One-half hour was allotted for this activity. On the second day, students selected the prompt they would write about. All students were allowed 30 minutes to write independently. On the third day, teachers lead students through a series of questions which prompted editing of the material they had previously written. This activity took 20 minutes.

We will present the results of the writing students did on Day 2. We will discuss the number of words students wrote in 30 minutes, as well as a qualitative measure of the "cohesion" of the writing content. Cohesion refers to the sentence-by-sentence coordination and flow of writing.

## Results of Year 1

The results of the Year 1 assessment will be presented separately for the early and late primary groups. For the early primary group, we will highlight student performance on two tasks in the reading assessment and one task in the writing assessment. With the late primary group, we will discuss one task and one scoring procedure for the reading assessment and one task and two scoring procedures for the writing assessment.

### Early Primary Results in Reading

The results for the early primary assessment in reading are presented in Tables 1 and 2. Two measures are presented: identification of the 26 capital letter names, and knowledge of the most common sound for each of the 26 letters. Thus, on each task, a score of 26 correct was possible. Student group performance can be examined in three ways. First, classroom teachers identified approximately equal groups of high, average, and low achievers. Second, the sample is divided into kindergarten students and first-grade students. Third,

Table 1. Early Primary Reading Assessment Task: Identify Capital Letter Names of the Alphabet

| | Total Sample | | | Kindergarten Students | | | First-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 174 | 22.8 | 5.9 | 85 | 20.9 | 7.1 | 89 | 24.6 | 3.7 |
| Teacher Judgment | | | | | | | | | |
| • High Achievers | 58 | 25.5 | 1.5 | 32 | 25.1 | 1.9 | 26 | 25.9 | 0.3 |
| • Average Achievers | 69 | 23.4 | 4.8 | 33 | 21.2 | 6.1 | 36 | 25.5 | 0.8 |
| • Low Achievers | 47 | 18.6 | 8.2 | 20 | 13.9 | 8.6 | 27 | 22.1 | 5.9 |
| School-Defined Status | | | | | | | | | |
| • General Education | – | – | – | 85 | 20.9 | 7.1 | 55 | 25.5 | 2.1 |
| • Chapter 1 | – | – | – | – | – | – | 31 | 23.6 | 5.3 |
| • Special Education | – | – | – | – | – | – | 3 | 18.3 | 5.5 |

Table 2. Early Primary Reading Assessment: Letter Sound Identification

| | Total Sample | | | Kindergarten Students | | | First-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 172 | 14.7 | 9.4 | 83 | 8.1 | 8.3 | 89 | 20.9 | 5.4 |
| Teacher Judgment | | | | | | | | | |
| • High Achievers | 58 | 17.3 | 8.4 | 32 | 12.5 | 8.5 | 26 | 23.2 | 2.5 |
| • Average Achievers | 69 | 14.7 | 9.1 | 33 | 7.6 | 7.6 | 36 | 21.3 | 4.1 |
| • Low Achievers | 45 | 11.4 | 10.2 | 18 | 1.3 | 2.1 | 27 | 18.1 | 7.5 |
| School-Defined Status | | | | | | | | | |
| • General Education | – | – | – | 83 | 8.1 | 8.3 | 55 | 21.9 | 0.7 |
| • Chapter 1 | – | – | – | – | – | – | 31 | 19.9 | 6.8 |
| • Special Education | – | – | – | – | – | – | 3 | 13.0 | 7.5 |

some of the students in Grade 1 received services beyond general education: 31 students were in Chapter 1, and 3 students were in special education.

Overall, there were few performance differences between student groups on knowledge of capital letter names, except for identified low achievers in kindergarten who scored only about half as well as the high achievers. The overall difference between kindergarten and first-grade students seems to be due primarily to the performance of low kindergarten students.

A more interesting pattern occurs with letter sounds. A clear difference exits between kindergarten and first-grade students. For example, high-achieving kindergarten students scored lower than the lowest group of first-grade students. It may be that a focus on learning letter sounds occurs more with first grade than kindergarten students. Although teachers indicate that the teaching of any subject may occur at any time throughout the day, they suggested that more formal academic instruction tended to occur in the afternoon, after the kindergarten students were dismissed.

### Early Primary Results in Written Expression

The written expression results are presented for the sentence copying task, which was scored using two criteria presented in Tables 3 and 4. The number of correct letter sequences, out of 14 possible was calculated. There were virtually no differences between the high, average, and low achievers in first grade, despite the fact that students only earned about 54% of the total possible score. The high-achieving kindergarten students performed about as well as the first-grade students; the average- and low-achieving kindergarten students were about .41 and 1.0 standard deviation units below the high-achieving kindergarten students, respectively.

The teacher rated the form and alignment of the sentence copying task on a 1 to 5 scale anchored by student samples. They did not rate the students in their own class, and were not aware of whether a student they were rating was in kindergarten or first grade. In

general, the results show that first-grade students performed better than kindergarten students, and high, average, and low achievers scored consistent with that ranking.

The data in Tables 1 through 4 provide fairly strong descriptive evidence that (a) first grade students performed better than kindergarten students, despite being in the same class, and (b) teachers do a good job of informally assessing the skill levels of their students. Finally, the data are inconclusive about the role of early intervention. A high percentage of kindergarten students performed noticeably different than other kindergarten and first-grade students. Identifying these students as at-risk may be premature. Differences in first grade are not apparent on most of the tasks. It may be that different tasks are needed to identify the continued problems low kindergarten students have in Grade 1. Conversely, the small differences in first grade on the capital letter naming task and the sound identification task may be important and perhaps should be reviewed. A more formal statistical analysis of the data are needed to address this question.

**Late Primary Results in Reading**

The ORF data for the late primary students are presented in Table 5. These data are based on the passage of medium difficulty, which were administered to all late primary students.

Table 3. Early Primary Writing Assessment Task: Copy a Sentence from a Chart Correct Letter Sequences

| | Total Sample | | | Kindergarten Students | | | First-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 173 | 7.8 | 1.5 | 84 | 7.3 | 1.7 | 89 | 8.3 | 1.0 |
| Teacher Judgment | | | | | | | | | |
| • High Achievers | 46 | 8.1 | 1.0 | 26 | 8.0 | 1.1 | 20 | 8.3 | 0.9 |
| • Average Achievers | 69 | 7.8 | 1.4 | 33 | 7.3 | 1.6 | 36 | 8.3 | 0.9 |
| • Low Achievers | 58 | 7.4 | 1.8 | 25 | 6.3 | 1.9 | 33 | 8.2 | 1.2 |
| School-Defined Status | | | | | | | | | |
| • General Education | – | – | – | 84 | 7.3 | 1.7 | 55 | 8.3 | 1.0 |
| • Chapter 1 | – | – | – | – | – | – | 31 | 8.2 | 1.1 |
| • Special Education | – | – | – | – | – | – | 3 | 8.3 | 1.2 |

The data can be examined on the same dimensions as the early primary data, except that two levels of achievement have been identified by the teacher instead of three. Also, more students in special education are in the late primary group than early primary group. The reading fluency measure indicated that the differences between second and third grade students were not as dramatic as the differences between student groups based on teacher judgment. At both second and third grade, there was an approximately 40 word-per-

Table 4. Early Primary Writing Assessment Task: Copy a Sentence from a Chart Qualitative Analysis

| | Total Sample | | | Kindergarten Students | | | First-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 173 | 2.6 | 1.1 | 84 | 2.2 | 0.9 | 89 | 3.1 | 1.1 |
| Teacher Judgment | | | | | | | | | |
| • High Achievers | 46 | 3.1 | 1.1 | 26 | 2.8 | 0.8 | 20 | 3.6 | 1.2 |
| • Average Achievers | 69 | 2.8 | 1.2 | 33 | 2.1 | 0.9 | 36 | 3.4 | 0.9 |
| • Low Achievers | 58 | 2.1 | 0.9 | 25 | 1.6 | 0.7 | 33 | 2.4 | 0.9 |
| School-Defined Status | | | | | | | | | |
| • General Education | – | – | – | 84 | 2.2 | 0.4 | 55 | 3.4 | 1.0 |
| • Chapter 1 | – | – | – | – | – | – | 31 | 2.6 | 1.1 |
| • Special Education | – | – | – | – | – | – | 3 | 3.3 | 1.2 |

minute difference between high and low achievement groups. This difference produces an effect size of approximately 1.3 standard deviation units. Apparently, teachers had a strong sense of their students' basic reading skills, and these reading skills corresponded closely to their judgments about overall student reading proficiency.

### Late Primary Results in Written Expression

The data for written expression are presented in Tables 6 and 7. Total number of words written is presented in Table 6, and the qualitative score of writing cohesion is in Table 7. Teachers did not rate their students' writing skills before the assessment, so there are no

Table 5. Late Primary Reading Assessment Task: Oral Reading Fluency Correct Words Per Minute

| | Total Sample | | | Second-Grade Students | | | Third-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 158 | 80.8 | 33.1 | 76 | 68.7 | 32.7 | 82 | 92.0 | 29.5 |
| School-Defined Status | | | | | | | | | |
| • General Education | 120 | 92.4 | 26.3 | 56 | 81.3 | 25.6 | 64 | 102.0 | 23.1 |
| • Chapter 1 | 25 | 52.6 | 22.4 | 14 | 41.4 | 22.8 | 11 | 66.8 | 11.6 |
| • Special Education | 13 | 28.2 | 21.7 | 6 | 14.2 | 4.0 | 7 | 40.3 | 23.6 |
| Teacher Defined Status | | | | | | | | | |
| Above Average | 85 | 101.0 | 22.3 | 29 | 94.3 | 19.4 | 56 | 104.0 | 23.2 |
| Below Average | 73 | 57.5 | 27.9 | 47 | 52.9 | 29.0 | 26 | 65.8 | 24.1 |

Table 6. Late Primary Written Expression Assessment Task: Total Number of Words Written

| | Total Sample | | | Second-Grade Students | | | Third-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 152 | 77.1 | 46.9 | 72 | 60.7 | 37.7 | 80 | 91.8 | 49.5 |
| School-Defined Status | | | | | | | | | |
| • General Education | 115 | 81.2 | 48.5 | 53 | 63.8 | 40.9 | 62 | 96.0 | 49.8 |
| • Chapter 1 | 25 | 63.2 | 32.4 | 14 | 53.0 | 22.0 | 11 | 76.1 | 39.5 |
| • Special Education | 12 | 66.8 | 52.6 | 5 | 49.2 | 36.9 | 7 | 79.4 | 60.9 |

high and low achievement groups as there were with the reading measure.

As with the reading measure, the third-grade students produced more than second-grade students, although the effect sizes were less than 1. The most interesting finding on the writing task concerned the relation between the amount of writing done by the special education students and how their writing was evaluated. In terms of writing productivity, the seven special education students in third grade produced more words than any of the student groups in second grade. However, the quality of their writing was rated the lowest of any group, except for special education students in second grade. Although this pattern is based on a small sample, it does highlight an interesting finding that may have instructional implications. For example, instruction with these special education students should focus more heavily, perhaps, on writing content than quantity.

## Student Assessment Year 2

### Setting

The school has made some changes in the nongraded primary structure for kindergarten through third-grade students in Year 2 of the project. The early primary group, previously kindergarten and first grade, has split into separate kindergarten and first grade classes. Two kindergarten classrooms now include morning and afternoon sessions. There are about 23 students in each of the four sessions. First grade consists of four full day classrooms, with approximately 22 students per class. Teachers from kindergarten and first grade plan together as an early primary team, and some activities combine both grades. The late primary team has not altered its organization or instructional approach. An additional change occurred when the school received recognition and funding under a Carnegie Foundation Grant as a Basic School.

### Procedures

The teachers have decided to maintain a strong focus on assessment in Year 2. This fall, each team of teachers (the early primary team still consists of kindergarten and first-grade teachers) met with us to discuss the value of the assessment procedures developed and administered in the spring of Year 1. As each assessment task was discussed, teachers stated their satisfaction with the task and the practical application of the results. The primary theme that came out of this meeting was that the most valued tasks were those that had the most clear implications for instruction. In

Table 7. Late Primary Written expression Assessemnet Task: Cohesion Rating on Sentence Flow and Logic

| | Total Sample | | | Second-Grade Students | | | Third-Grade Students | | |
|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | n | Mean | SD |
| Total Number of Students | 153 | 2.5 | 1.0 | 73 | 2.0 | 0.7 | 80 | 2.8 | 1.0 |
| School-Defined Status | | | | | | | | | |
| • General Education | 116 | 2.6 | 1.0 | 54 | 2.1 | 0.7 | 62 | 3.0 | 0.9 |
| • Chapter 1 | 25 | 2.2 | 0.9 | 14 | 1.8 | 0.7 | 11 | 2.5 | 0.9 |
| • Special Education | 12 | 1.6 | 0.6 | 5 | 1.6 | 0.8 | 7 | 1.7 | 0.4 |

general, the teachers believed the measures represented what they taught. Overall, the results were highly valued.

The measures administered in the spring of Year 1 could be used only to make summative decisions. Teachers had a single data point for each task on each student that was collected very close to the end of the year. In planning for Year 2, the teachers discussed several issues for decision making such as: (a) individual student performance, (b) instructional/curriculum procedures, (c) group (classwide) performance, (d) school and level performance, and (e) communication with parents. Given the nature of the inquiries and the development of the measures, the teachers determined there was value in conducting multiple assessment activities multiple throughout the year. For the most part, each measure will be administered at least three times during the school year, at approximately equal intervals. A schedule for administration of each measure for the two levels appears in Table 8.

***Additional Plans***

As part of Year 2, teachers targeted students they believe are at-risk socially, behaviorally, or academically. Target students will receive monthly administration of selected measures. Parallel forms of each measure have been developed for assessment on a frequent basis. With parallel forms, the practice effect should not influence student performance. Rather, the data collected should illustrate individual progress or lack of progress over the school year. The measures will be scored in a manner that is sensitive to student change. Therefore, monthly monitoring of student performance will provide teachers with academic information regarding student progress. Teachers may determine a need for somehow changing or supplementing the instructional program.

Teachers may use the data from all measures to undergo program evaluation in any curriculum area. Additionally, in combination with the measures collected for the entire level, teachers will have a local normative comparison group on identical measures. Teachers can examine an individual student's performance in reference to the group, and any movement in relation to relative standing in that group.

***Early Primary Team***

First-grade and kindergarten teachers met collectively in planning meetings to review the previous year's assessment procedures, and to determine what measures they would

Table 8. Administration Schedule for Individual Measures

| | MONITORING APPROACH | | | | |
|---|---|---|---|---|---|
| | NORMATIVE PROGRESS: ALL STUDENTS | | | | INDIVIDUAL PROGRESS: 56 AT-RISK STUDENTS |
| **EARLY PRIMARY** | Times per Year | | | | Once per Month |
| **READING** | | | | | |
| Concepts About Print | √ | | √ | √ | |
| Letter Names | √ | | √ | √ | |
| Letter Sounds | √ | | √ | √ | √ |
| Sentence Reading | √ | | √ | √ | √ |
| Passage Reading | √ | | √ | √ | √ |
| **LANGUAGE ARTS** | | | | | |
| Alphabet Writing | √ | √ | √ | √ | √*all* |
| Name Writing | √k | √k | √k | √k | √ |
| Sentence Copying | √ | √ | | | √ |
| Sentence Writing | | √ | √ | | |
| Sentence Dictation | | √ | √ | | √ |
| Written Express.(Picture) | √ | √ | √ | √ | |
| **LATE PRIMARY** | | | | | |
| **READING** | | | | | |
| Passage choice(?) | | √ | √ | √ | |
| Oral Reading Fluency | | √ | √ | √ | √ |
| Oral Retell | | √ | √ | √ | √ |
| **LANGUAGE ARTS** | | | | | |
| Writing Style | Sequenced | | | | Random |
| Brainstorm | √ | √ | √ | √ | √ |
| Writing | √ | √ | √ | √ | √ |
| Editing | √ | √ | √ | √ | |

use in Year 2 and for what purpose the data would be used. Additionally, one of the resource teachers and the speech and language therapist attended the early primary team meetings.

*Reading.* Teachers in both kindergarten and first grade chose to maintain the reading procedures developed in Year 1. All students, regardless of age, receive the same measure consisting of five main tasks (see Year 1 measure description). Assessment is stopped if or when a student "bottoms out." The consideration here is for students to demonstrate their abilities, and teachers do not want to push students into a situation of discomfort.

At this time, the teachers also decided to have the reading measure administered three times during the school year to all students. After analyzing the baseline data in the fall of Year 2, data from several tasks were informative in terms of student ability or inability to complete prereading and reading tasks. Not surprisingly, students identified as target students by teachers prior to the assessment generally scored in the lower quarter of the class.

*Written Expression.* The teachers opted to remove particular tasks from the previous version of the Written Expression measure. Several tasks had great similarity in skill requirements. For the most part, those tasks that did not show variance in student performance and were not useful for diagnostic purposes were dropped. Tasks that were maintained this year also differed between kindergarten and first grade. The types of tasks used in the 1994-1995 measures are listed in Table 8.

The teachers decided to have Written Expression measures administered four times during the school year to all students. The teachers were interested in monitoring student ability to write more independently and creatively, using the story starter. Additionally, they were interested in observing when student writing skills appeared to change qualitatively (e.g. spacing, alignment, letter formation).

***Late Primary Team***

Teachers began the decision-making process for the 1994-95 school year by reviewing procedures and results from the previous spring assessment and projects completed in coordination with the grant. The team, consisting of six general teachers, one resource specialist, and the music specialist began with the writing measures. Teachers for the most part were very satisfied with the format and structure of the assessment materials developed and administered in the spring. Two meetings were scheduled to plan assessment in reading and written expression for this school year. Mathematics measures are still in the planning stages.

*Reading.* The three reading passages used in the spring were selected again for fall assessment. Teachers found the information from last spring to be very useful, and decided to maintain the oral reading and oral retell measures. They are keeping the same procedures as the previous spring, including audio taping each student. Additionally, the teachers decided to have multiple administration periods during the year to analyze student performance over time rather than having one data point. The first assessment was administered in early October, and will be readministered with parallel form passages in the winter and late spring. Different reading passages for winter and spring will be selected using the same selection criterion established in Year 1.

*Written Expression.* The teachers value writing as an integral part of their curriculum. Writing tasks are interspersed across the instructional day as a component of basic academics and content area instruction. This year, the teachers have opted to administer similar writing tasks four times during the year, approximately once per nine-week quarter. In early October, the teachers designed a written expression task for persuasive writing. Students were to use information they had been learning about positive health habits

and apply that knowledge to convince their audience to eat healthy snacks (see Figure 1). Students were given two situations and selected their favorite about which to write.

In future written expression administrations, teachers plan on assessing other writing styles including narrative, descriptive, and expository. The administration and scoring procedures will be identical for each sample collected. The intent is to sample writing taught throughout the school year and to evaluate student performance in each style.

1. Think of a healthy snack. Write a story that tells what your healthy snack is and why it should be eaten. Convince your classmates that your healthy snack is the best and why they should eat it.

2. Your teacher is about to put $.50 in a candy machine for a snack. Write a story to convince your teacher to choose a healthier snack and not candy.

Cross out the choice you did not use.

Figure 1. Sample written expression task for persuasive writing.

## Data Utilization

Through this project, teachers are transitioning into using more authentic, yet technically adequate means by which to obtain indices of student performance. The introduction of classroom-based measures in nongraded early and late primary school structure has altered assessment practices for teachers in several ways.

In the first project year, we learned current practices and student performance. From the initial assessment information, several tasks in reading and language arts identified students with differing skills. Many students clearly demonstrated knowledge on several tasks. Students' performance was measured at the same time, yet clear differences in performance were evident based on age level and ability. Teacher judgments of student performance were accurate when compared to assessment outcomes. This relationship provides us with consequential and social validation of the measures. Additionally, teachers were able to examine overall level of performance and evaluate program effectiveness in relation to the particular curriculum area. The assessment occurred after the majority of instruction for the school year was complete. Therefore, as mentioned previously, these measures were summative rather than formative.

In planning for the future, the school continues to work toward systematic restructuring, which includes the incorporation of DAP instruction in a nongraded primary setting that is inclusive for students with disabilities. Teachers will have direct information for decision making on three levels. First, continued formative evaluation of student performance will occur in basic academics. Second, data collection from different contexts will be added; (a) observations will occur regularly in each classroom, and (b) the teachers will work to enhance teacher, school, and parent communication concerning student performance through reports, graphic displays, and portfolio content.

### Assessment

The measures and procedures developed in Year 1 have contributed to implementation in Year 2. As stated previously, all students will receive multiple administrations of each measure, equally distributed across the school year. Administration of parallel forms of these measures 3 to 4 times throughout the school year will serve in the formative evaluation process. Teachers will be able to evaluate any individual student's performance in comparison to his previous performance during the school year and across multiple years, rather than having a single summative report on student performance at the end of each school year.

Scoring procedures utilized are sensitive to small increments of change. By using parallel forms of each measure multiple times throughout the school year, change will be detected in student performance. Teachers can use this information to make informed program decisions. For example, this fall while examining results from an initial measure, teachers could evaluate and/or confirm scores for those students who were behind expected performance levels. Immediately, the teacher could plan instructional practices to supplement, or somehow change instruction for that student or group of students. Following the next assessment period, the teachers will be able to evaluate the effect of the instructional intervention for an individual or group of students by comparing individual scores from one assessment period to the next.

Additionally, four at-risk target students from each classroom will be measured monthly using parallel forms of selected tasks. By design, these students were selected by teachers for frequent monitoring. Data will be reported to teachers following each assessment. Teachers will be able to use this information from both individually-referenced and

norm-referenced view points. They can compare the student's performance to previous performance, noting change as well as individual performance in relation to relative standing within the peer group. Teachers can make informed decisions about a student's progress over time and determine if an intervention is necessary to best meet the student's educational needs.

The teachers have a sense of expectations for student performance in a DAP setting. Teachers may use these data to judge actual performance against expectations as well as evaluate the program, curriculum, instructional practices, and individual students.

**Observation and Consultation**

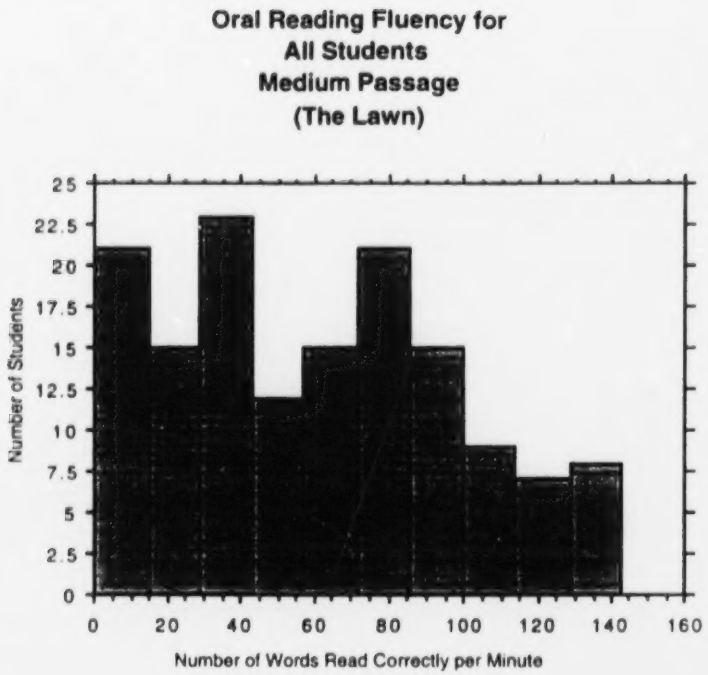
The context within which the data are used is important to the restructuring efforts. Information collected on student performance is one essential piece within the structure of the nongraded primary setting. Students form the teacher's classrooms and teachers form the building structure. Multiple observations have been randomly scheduled in all nongraded primary classrooms. Our intent of these visits is to observe target students and peers in different classroom contexts. In concert with the grant research, observers will attend to the adaptations teachers make in the classroom structures and instruction for students with disabilities and students having difficulty with classroom academic and behavioral expectations. Additionally, observers note the inclusiveness of the setting. In other words, what is the degree to which students with disabilities are involved in instruction and activities with their peers? We hope to observe if and when students participate in the classroom setting, and how the teachers adapt instruction to make inclusion successful for all students in a nongraded primary classroom with DAP philosophy.

A component in implementing the restructuring of nongraded primary classrooms in this school is the teamwork of teachers. As a part of team collaboration, teachers will consult with one another and/or specialists (e.g., chapter one and resource teachers) regarding students for whom they have academic or behavioral concerns. Recently, the early primary teachers established a schedule of observations in classrooms within their level. The intent of these visits is to observe teaching practices, and get procedural information from one another. But most importantly, the teachers wish to discuss areas of concern and collaborate about the instruction. For example, a teacher asked what the most effective way was to demonstrate and practice instruction from the big books. Rather than merely hearing a description of the procedure, this teacher will observe her colleagues teaching children from the same level. The teachers will then discuss and determine what procedure would be effective in another classroom.

**Communication**

An additional form of decision making involves communication. Teachers have scheduled assessments to receive student scores at nine-week grading periods. Graphic displays illustrate the performance of each primary level group. Scores displayed using both a histogram and box plot provide a visual representation of student performance distributions (see Figure 2). Teachers also will receive an individual report on each student, which numerically displays performance scores. Teachers may use the graphs and student scores to relate individual performance to the group.

This year teachers have used results from the normative data collection to share with parents the present level of student performance and relative standing in the group. Teachers and parents were pleased with this procedure. Several teachers expressed how easy it was to demonstrate to parents the academic expectations of the classroom, and how their child was doing in relation to classroom expectations, previous performance, and their peers.




**Descriptive Statistics**

| | M-CWM |
|---|---|
| Mean | 60.336 |
| Std. Dev. | 38.733 |
| Std. Error | 3.206 |
| Count | 146 |
| Minimum | 0 |
| Maximum | 143.000 |
| # Missing | 5 |

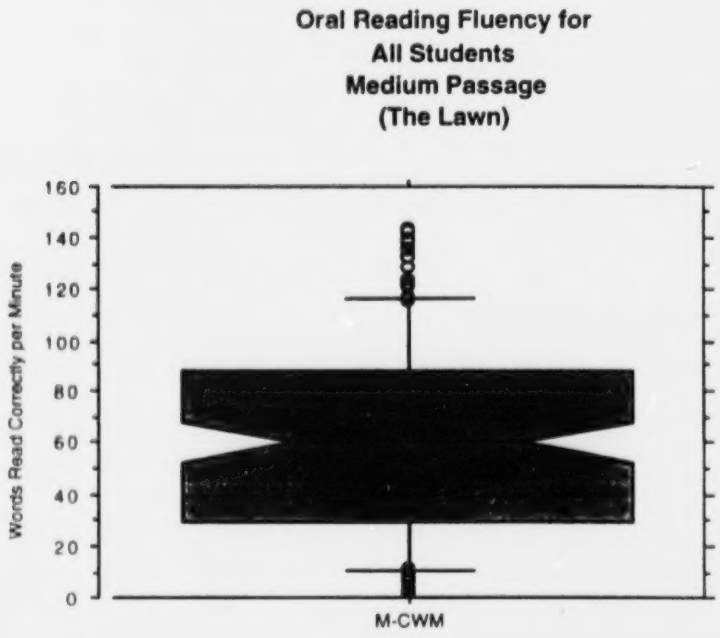



Figure 2. Correct words per minute tatistics for oral reading fluency tasks.

### Summary

Plans for data utilization have expanded during each project year. Teachers will be using assessment information in numerous contexts throughout the project. Additionally, observations and consultation opportunities have been structured to enhance communication with other team members and specialists. Teachers have a much broader and more accurate base from which to make decisions about students, curriculum, and program structure. Finally, reporting procedures are being developed to share information with parents and the community at large regarding student performance in all nongraded primary classrooms.

As the project moves into years three through five of implementation, further development of assessment materials is planned. Teachers are interested in measuring areas of philosophic import beyond basic academics. Additionally, the University of Oregon is interested in monitoring the methods and procedures the teachers use for adaptation and inclusion of students with special needs in the nongraded primary settings.

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